



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,825	09/29/2003	Kevin P. Wright	03AB139/ALBRP327US	2201
7590		11/01/2007		
Susan M. Donahue				
Rockwell Automation				
704-P, IP Department				
1201 South 2nd Street				
Milwaukee, WI 53204				
			EXAMINER	
			KASENGE, CHARLES R	
			ART UNIT	PAPER NUMBER
			2125	
			MAIL DATE	DELIVERY MODE
			11/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/673,825

Applicant(s)

WRIGHT ET AL.

Examiner

Charles R. Kasenge

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 and 32 is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed 8/23/07 have been fully considered but they are not persuasive. The Office reasserts that Ross et al. U.S. Patent 6,757,590 discloses a plurality of loads associated with a system, wherein at least one subset of the plurality of loads is a member of a class (col. 4, lines 2-8; col. 10, lines 47-53; col. 11, lines 3-7), wherein members of the class are assigned to the class based upon a requirement that all members of the class must be connected to or shed from an energy supply in unison (col. 10 and 11, lines 54-7). Ross states "the loads may be grouped, as for instance in high, medium, and low priority groups (col. 10, lines 51-53)." The Examiner interprets these groups as analogous to the Applicant's "class". Ross further states "if... the instant load demand is greater than the Total Kw Capacity, a load shedding condition arises. This is done... by disconnecting (shedding) certain ones, or **groups**, of the loads... (col. 10, lines 61-67)." The Examiner interprets the Total Kw Capacity as the Applicant's "optimum level" and the load demand as the Applicant's "total system demand". Ross explicitly teaches shedding a load group(s) in unison (col. 10, lines 65-66). Referring back to the cited quotes in Ross, one can observe from Ross' teaching that if the low priority group was shed, you would clearly have the high and medium priority loads still connected in unison (see also col. 11, lines 4-7).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2125

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 7-10, 12-25 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Ross et al. U.S. Patent 6,757,590. Regarding claims 1, 9, 19, 24, 25 and 29, Ross discloses a decentralized energy control and management system, comprising: a plurality of loads associated with a system, wherein at least one subset of the plurality of loads is a member of a class (col. 4, lines 2-8; col. 10, lines 47-53; col. 11, lines 3-7), wherein members of the class are assigned to the class based upon a requirement that all members of the class must be connected to or shed from an energy supply in unison (col. 10 and 11, lines 54-7); all members of a class are connected to an energy supply if connecting the entire class would not bring total system demand above an optimum level (col. 10 and 11, lines 54-3), wherein total system demand is the total energy demand for all loads connected to the energy supply (col. 10, lines 54-64); and a plurality of networked load controllers associated with respective loads (col. 4, lines 8-14), wherein the load controllers cooperate to determine which load should be shed when the total system demand exceeds an optimum limit (col. 10 and 11, lines 54-24).

Regarding claims 2-4, 7, 8, 12, 20, 21 and 23, Ross discloses the system of claim 1, wherein loads are shed based on a priority associated with each load (col. 10 and 11, lines 54-24). Ross discloses the system of claim 2, wherein priority is based at least in part on load function and context (col. 10 and 11, lines 54-24). Ross discloses the system of claim 1, wherein the load controllers communicate over a local area network (LAN) (Fig. 1). Ross discloses the system of claim 1, further comprising a meter to measure parameters associated with energy

Art Unit: 2125

consumed by the system (col. 10, lines 54-59). Ross discloses the system of claim 7, wherein the measurements are transferred to and stored by a host computer (col. 10, lines 54-59; col. 6, lines 44-55).

Regarding claims 10, 13, 14, 22, 27 and 28, Ross discloses the system of claim 9, further comprising a power supply (col. 2, lines 15-25). Ross discloses the system of claim 12, wherein the optimization algorithm includes parameters associated with at least one business concern (col. 4, lines 2-8). Ross implicitly discloses the system of claim 13, wherein the optimization algorithm includes parameters associated with the health of the machine (col. 10 and 11, lines 54-24).

Regarding claims 15-18, Ross discloses the system of claim 9, wherein the optimization algorithm employs intelligent agents to act as proxies for the actual machines when determining the optimum load for each machine (col. 10 and 11, lines 54-24). Ross discloses the system of claim 9, wherein the optimization algorithm utilizes a belief network (col. 10 and 11, lines 54-24). Ross implicitly discloses the system of claim 9, wherein at least a subset of the machines are located physically remote from one another (col. 4, lines 2-8). Ross discloses the system of claim 9, wherein the load controllers also determine which previously shed loads to reconnect (col. 10 and 11, lines 54-24).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2125

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. U.S. Patent 6,757,590. Ross does not explicitly disclose the load controllers communicating wirelessly or over a WAN. However it is commonly known in the art that one can convert a traditional wired connection to a wireless connection that uses a WAN.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use wireless technology over a WAN to communicate with the load controllers. One of ordinary skill in the art would have been motivated to do this since it is well known in the art that wireless allows easier data transmission from remote locations; allowing the controllers to be placed in various remote locations while being connected to the network more easily.

6. Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to the claims above, and further in view of McKay et al. U.S. Patent 6,345,501. Ross does not specifically disclose using a variable speed motor as a load. McKay discloses a variable speed motor such that load shedding with respect to the motor corresponds to reducing the power to the motor (col. 1, lines 3-6 and 25-36).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have a variable speed motor as a load for Ross' energy management system. One of ordinary skill in the art would have been motivated to do this since the loads for Ross' system can be any load (col. 4, lines 2-8).

Art Unit: 2125

Allowable Subject Matter

7. Claims 30 and 32 are allowed.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CK
October 18, 2007


KIDEST BAHTA
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100